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- (3) generating at least one report listing the crystals within said tables that match said input data; and
- (b) using said macro of said relational database to enter electron diffraction data obtained from said experimental sample and to obtain said at least one report. ⁵
4. The method for classifying crystal electron diffraction data according to claim 3, wherein said Code data is derived from reduced unit cell parameters, and said step of comparing said input data includes calculating d-spacings produced by double diffraction. ¹⁰
5. A relational database for classifying crystal electron diffraction data obtained from an experimental sample, said database comprising:
- (a) at least three tables holding Code data, Formula data, and Element data, respectively; wherein said Code data ¹⁵ includes information relating to the d-spacings and acute angles of diffraction patterns of crystals, said Formula data includes information relating to the chemical formulae of said crystals, and said Element

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- data includes information relating to the presence of elements of high atomic number in said crystals;
- (b) at least one macro for performing searches using said tables; said at least one macro including the steps of:
- (i) requesting input data relating to observed d-spacings, acute angles, experimental error limits, and anticipated atomic numbers of an experimental sample;
- (ii) comparing said input data with the data in said tables in accordance with said experimental error limits; and
- (iii) generating at least one report listing the crystals within said tables that match said input data.
6. The relational database according to claim 5, wherein said Code data is derived from reduced unit cell parameters, and said step of comparing said input data includes calculating d-spacings produced by double diffraction.

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